

## ABSTRACT

A semiconductor device having a dynamically-reconfigurable circuit mounted thereon for maintaining software compatibility independently of the arrangement of the dynamically-reconfigurable circuit is provided.

Simultaneously with execution of software, the semiconductor device automatically generates data for reconfiguring the dynamically-reconfigurable circuit and driver software for operating the dynamic circuit, and replaces an original program with it.

In this way, by keeping the software compatibility, existing software resources can be commonly used and the same software can be employed for various devices.